JUL 2 8 2005 E

PTO/SB/08B (07-05)
Approved for use through 07/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE TRAITS TO ABBOUND erwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known & for form 1449/PTO **Application Number** 10/656,684 **Filing Date** INFORMATION DISCLOSURE September 5, 2003 STATEMENT BY APPLICANT First Named Inventor Jeff Miller Art Unit 1712 (Use as many sheets as necessary) **Examiner Name** TUCKER, PHILIP C. Attorney Docket Number Sheet **HALB:045** of 1

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
PT	ZA	Litigation Documents regarding related U.S. Patent No. 6,887,832 B2, issued May 3, 2005, being filed herewith in accord with MPEP 2001.06(c)				
8						
		•				
*						

i Examiner	0 2	Date	
			Olia C
Signature	N CIALLON	Considered	41/05
- 3	4 · (00/0)C	Constante	11/0-

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not id conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## **CENTRAL FAX CENTER**

FEB 0 3 2005

PTO/SB/08A (08-03)

p.5

	Approved for use through 07/31/2004, OMS 0651-003
	U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
e Paperwork Reduction Act of 1995, no persons are required to respond	to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO	Complete if Known			
	Application Number	10/656.684		
INFORMATION DISCLOSURE	Filing Date	September 5, 2003		
	First Named Inventor	Jeff Miller		
STATEMENT BY APPLICANT	Art Unit	1712		
(Use as many shoots so necessary)	Examiner Name	TUCKER, PHILIP C.		
Sheet 1 of 1	Attomey Docket Number	HALB:045	フ	

Ē				DOCUMENTS	
Examiner Initiats*	Cha No.	Oocument Number  Number-Kind Code <sup>2 (Finance)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pagas, Columna, Unea, Where Relevant Passages or Relevant Figures Appear
Ph.	SA	US- 6,462,096	10-08-2002	Dino, et al.	-
77	SB	<sup>US-</sup> 2004/0110642	6-10-2004	Thompson, et al.	
		US-			
·		ับระ			
		US-			<del></del>
		US-			
		US-	,		
		US-			
		us.	<u> </u>		<del> </del>
		US-			
		US-	<u> </u>		<del> </del>
		US-			
		US-			
-/·		US-			<del>                                  </del>
		US-	_		
		US-			<del></del>
***		US-	<u> </u>		-
		US-			<u> </u>
		US-	<del></del>		

FOREIGN PATENT DOCUMENTS						
Examiner Initiats*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patenties or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Т
		Country Code <sup>3</sup> "Number <sup>4</sup> " Kind Code <sup>3</sup> (If known)	MM-DD-YYYY	- Price to Great December	Or Relevant Pigures Appear	Ŀ
11						F
						╂
						t
						L
						Г

			· · ·
Examinor		Date	
Signature	CO-CHEAR	Considered	1 11/05
			1 / 0 /

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at <a href="https://www.tspio.gov">www.tspio.gov</a> or MPEP 801.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must proceed the certain number of the patent document. \*Idnd of occument by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. \*Applicant is to prace a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPYO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application from to the USPYO. Time will vary depending upon the individual case. Any convents on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, cell 1-800-PTO-9199 (1-800-785-9199) and select option 2.

PTO/SB/08a (08-03)
Approved for use through 07/31/2006, OMB 0651-0031

Application Number Fifting Date First Named Inventor Art Unit Examiner Name Attorney Docket Number	10/656,684 September 5, 20 Jeff Miller and J 1712	<i>wn</i>	
Fiting Date First Named Inventor Art Unit Examiner Name	September 5, 20 Jeff Miller and J		
Fiting Date First Named Inventor Art Unit Examiner Name	September 5, 20 Jeff Miller and J		
First Named Inventor Art Unit Examiner Name	Jeff Miller and J		
Art Unit Examiner Name	1712	CII KIIIIIGI	
Examiner Name			
	To be Assigned		
Attorney Dricket Number   HALR:045			1
A THE PACIFICATION			_
TENT DOCUMENTS	P:	nces, Columns, Lines, Where	
Name of Patentee or Applicant of Cited Docum	R	Pigures Appear	
Anderson et al.			
Dorsey et al.			
Miller et al.			_
Thompson et al.			_
N PATENT DOCUMENTS			γ-
Publication Date Name	uf Patentoo or	Where Relevant	l
MM-DD-YYYY Applicant	of Cited Document	Passages or Reloyant Figures Appear	Т
			4-
		<u> </u>	_
			┸
			+
			+
			+
			4
			+
			╀
			ㅗ
Date			
	sidered	1/05	
	Applicant of Cited Docum  Anderson et al.  Dorsey et al.  Miller et al.  Thompson et al.  N PATENT DOCUMENTS  Publication Date MM4-DD-YYYY  Applicant  Date Con	Name of Patentee or Applicant of Cited Document  Anderson et al.  Dorsey et al.  Thompson et al.  Thompson et al.  Name of Patentee or Applicant of Cited Document  Name of Patentee or Applicant of Cited Document  Date Considered	Name of Patentee or Applicant of Cited Document  Anderson et al.  Dorsey et al.  Miller et al.  Thompson et al.  Name of Patentee or Rulevan Passages or Rulevan Passa

considered, include copy of this form with next communication to applicant, 1 Applicant's unique citation designation number (optional), 4 See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04, 3 Emer Office that issued the document, by the two-letter code (MPIO Standard ST.3), 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 3 Nind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant to place a check mark here if control to the proportion of the control of the patent English language Translation is attached.

English language Transistion is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by This collection of information is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, the USPTO to process) on application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, the USPTO. Time will vary depending upon the individual case. Any including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any including gathering, preparing, and submitting the complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED TO THE ADDRESS SEND TO Complete Property and Alexandria VA 22313-1450. FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Fider the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Application Number 10/656,684

Filing Date September 5, 2003

First Named Inventor Jeff Miller

Art Unit 1712

Examiner Name To be Assigned

Attorney Docket Number HALB:045

Complete if Known

U.S. PATENT DOCUMENTS						
Document Number		Dublication Data	Name of Patentee or	Pages, Columns, Lines, Where		
Examiner Initials*	Cite No.1	Number	Kind Code (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				·
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				

				FOR	EIGN PATENT DO	CUMENTS		
Examiner Initials	Cite No.1	Office <sup>3</sup>	Foreign Patent Do Number4	ocument Kind <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Тв
197	RA	EP	1424380	A1	06-02-2004	Elementis Specialties, Inc.		
<b> </b>		igspace						$ldsymbol{oxed}$
	<b>—</b>	igspace					<u> </u>	L
<u> </u>	<b>—</b>	igsquare						
<b></b> '		$oxed{oxed}$						<u> </u>
<b>—</b>	<b>—</b>	igspace			<u> </u>		<u> </u>	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$
		<del>↓</del> ∴↓					<u> </u>	
1	1		İ		,			

Examiner	0/	Date	11.1.7
Signature	· (v CKEL)	Considered	11/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, tholide copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English tanguage Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**GROUP** 

1712

APR 2 6 2004		Sheet <u>1</u>
RM PTO-1449 (Modificanti	ATTY. DOCKET NO. 2001-IP-003024U1P3	SERIAL NO. 10/656,684
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT Jeff Kirsn	er et al.

FILING DATE

SIPE

(Use several sheets if necessary)

FORM PTO-1449

EXAMINER

September 5, 2003 U.S. PATENT DOCUMENTS Filing **EXAMINER** Date if INITIAL Document No. Subclass Appropriate Date Name Class AA US 07/31/03 Krisner et al. 507 100 2003/0144153 **A1** 04/03/03 Kirnser et al. 507 100 AB US 2003/0064897 A1 AC AD ΑE AG AH ΑI AJ ΑK FOREIGN PATENT DOCUMENTS Translation Document No. Date Country Class Subclass Yes No AL AM AO AP AR AS AT OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) ΑV AW

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

DATE CONSIDERED

11/05

FORM PTO-1449 Mydified

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT ATTY. DOCKET NO. 2001-IP-003024U1P3 SERIAL NO. 10/656,684

APPLICANT

Jeff Kirsner et al.

(Use several sheets if necessary)

FILING DATE September 5, 2003 GROUP unknown

					sepi	Lember 3, 2003	1	dirkitowit	
				U.S. PA	TENT L	OCUMENTS			
<del>-</del>									Filing Date if
EXAMINER INITIAL		Do	cument No.	Date		Name	Clas	s Subclass	Appropriat
	AA			<del> </del>		,	<del> </del> -		
	AB					,			
	AC	<del>                                     </del>				<del>.</del>	1		
	AD			-	1		<del> </del>		
	AE				<u> </u>				
	AF			1					
	AG			<del></del>					
	AH			<u> </u>					
	ΑI								
· · · · · · · · · · · · · · · · · · ·	AJ								
	AK								
				FORE	IGN P	ATENT DOCUMENTS			
		Do	ocument No.	Date		Country .	Clas	s Subclass	Translatio Yes No
01	AL	WO A1	02/053676	07/11/02	PCT		со9к	7/06	х
P	AM	WO A1	02/053675	07/11/02	PCT		СО9К	7/06	х
9	AN	EP A1	1 111 024	06/27/01	Europ	е	со9к	7/06	Х
- 1 1	AO								
	AP								_
	AR								
	AS								
•	АТ								<u></u>
·	7.	OTH	ER ART (Inc	luding Aut	hor,	Title, Date, Pe	rtinen	t Pages, Etc.	.)
.	ΑÜ	<u> </u>							<del></del>
	AV								
	AW						·		
EXA	MINE	R.		<del>.</del>		DATE CO	ONSIDER	ED	
			P. Tuck	e R				05	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1	PE					ATTY DOCKET NO. HALB:045	S	SERIAL NO. 10/656,684			
70.	_		ATION DISCLOSURE			Jeff Miller and Jeff Kir	sner				
SEP 1	6 300		136 36461 <i>6</i> 1 3116613 11 1166633	ary)		FILING September 5, 20		ROUP			
A VE		IJ IJ		U.S	. PATENT	ATENT DOCUMENTS					
EXAMINE	1		DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
PIC	AA	4,50	08,628	04/02/1985	Walker	et al.	252	8.5	05/19/19		
	АВ	5,33	33,698	08/02/1994	Van Sly	ke	175	63	05/21/1993		
	AC	5,84	46,913	12/08/1998	Sawdon		507	103	03/17/19	97	
	AD	5,63	35,457	06/03/1997	Van Sly	ke	507	103	04/17/19	95	
	AE	4,01	12,329	03/15/1977	Hayes e	t al.	252	8.5P	09/22/19	75	
	AF	5,23	37,080	08/17/1993	Daute e	t al.	554	213	07/10/19	80	
	AG	5,33	30,662	07/19/1994	Jahnke	et al.	252	8.551	03/17/19	92	
	АН	6,090,754		07/18/2000	Chan et al.		507	110	07/18/2000		
	ΑI	6,001,790		12/14/1999	Schmitt et al.		C11D 1	722	12/17/19	97	
•	AJ	5,403,508		04/04/1995	Reng et	al.	C11D 1	825	05/13/19	93	
Ø	AK	AK 5,308,401		05/03/1994	Geke,et	al.	134	2	04/30/19	91	
, v. (				FORE	IGN PATE	NT DOCUMENTS					
			DOCUMENT NUMBER	DATE	1	COUNTRY	CLASS	SUBCLASS	TRANSI YES	ATION NO	
P	AL	GB	2,212,192 A	07/19/1989	United	Kingdon	C09K	7/06			
	AM_	EP	0134173	03/13/85	Europe	$\sim$	€09K	7/06	~	L	
PI	AN	wc	83/0249	09/01/1983	PCT		C09K	7/06			
H	AO	GB	2,287,052 B	03/13/1996	United	Kingdom	C09K )	7/06			
- (	AP	ĐĒ	196 43 857	05/07/1998	German	i	C09K	BOTF		N	
			OTHER DOCUME			, Title, Date, Pertinent F				•	
R	}	AQ				dol 135-7E", "Neodol 23", ol 23-3E", "Neodol 23-6.5" -3E", "Neodol 25-7", "Neo ol 91.2.5E", "Neodol 91-5E 5-9E", "Neodol 25E", "Neo			-1.1E", "N ol 23E", "I 'Neodol 45- 91-8", "N	eodol Veodol 4E'', eodol	
A		cont'd	"Neodol 45-7 E", Produc URL:http://www.shellch	ct Data Sheets, S emicals.com/neo	HELL CF	IEMICALS, Retrieved from ved on 2003-09-13, each da	n the interne ta sheet com	t: prising two pag	ges.		
EXAMINI	R	1	TUCKER			DATE CONSIDERED	105				
*EXAMIN	ER: Initi	al if re	ference considered, whether	r or not citation is nmunication to app	in conform plicant.	ance with MPEP 609; Draw i		tation if not in co	onformance	and not	

Oi	7 6	_				ATTY DOCKET NO. HALB:045	s	SERIAL NO. 10/656,684			
	INF		ATION DISCLOSURE ise several sheets if necess			Jeff Miller and Jeff Kirsner					
SEP SEP	162	, w	.} }	<i>,</i>		FILING GROUP September 5, 2003					
E CANA		را الم	<del>/</del>	U.5	. PATENT	ATENT DOCUMENTS					
EXAMINER INITIAL			DOCUMENT NUMBER	DATE		NAME		SUBCLASS	SUBCLASS FILING DATE		
P	AR	6,11	10,874	08/29/2000	Van Sly	ke	507	103	09/04/19	98	
<del></del>	AS.	6,10	07,255	08/22/2000	Van Siy	ke	507	103	09/04/19	98	
-	AT	6,03	34,037	03/07/2000	Van Sly	ke	507	103	01/07/19	99	
	AU	5,95	58,845	09/28/1999	Van Sly	ke	507	103	01/29/1996		
	AV	5,25	54,531	10/19/1993	Mueller	et al.	507	131	01/21/19	92	
	AW	5,92	29,297	07/27/1999	Theriot	et al.	585	525	09/25/19	97	
-	AX	5,8	77,378	03/02/1998	Overstr	eet et al.	585	637	09/15/19	97	
	AY	5,84	49,974	12/15/1998	Claremi	beau et al.	585	668	01/28/1997		
	AZ	5,58	89,442	12/31/1994	Gee et a	l.	507	103	06/07/19	95	
1	ВА	5,744,677 04/28/1998			Wu		585	512	07/14/19	92	
RI	вв	5,569,642 10/29/1996			Lin		507	103	02/16/19	98	
(				FORE	IGN PATE	NT DOCUMENTS				,	
			DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSI YES	ATION NO	
PI	вс	GB	2,309,240 A	07/23/1997	United Kingdom		C09K	7/06		·	
6	BD	QE	19643840A	_07/05/1998	German		E21B	21/14	~	4	
M	BE	wo	98 23491 A	11/25/1993	PCT		C09K	7/06			
	BF	DE	40-18 228 A	12/12/1991	German		C09K	7/06		1	
,	BG-	Đ€	44 20 455 A	12/14/1995	German	7	C89K	7/90	~	1	
			OTHER DOCUMEN			Title, Date, Pertinent P					
P		вн	URL:http://www.condea 2001-03-29, page 1-page	.de/products/sur 4.	factanta/si	2164097; Retrieved from tl urfactanta_nonionic/alfonic	.html," retri				
Pl		BI	"Tergitol NP9", "Tergito NP-4", "Tergitol 15 S 5" "Tergitol TMN 6", Terg http://www.sigmaaldrich ery=tergitol&Collection=	ol 15-S-9", "Ter , "Tergitol 15-S- itol 15-S-30", "T .com/cgi-bin/hsr rescatalog&Cur	gitol 15-S- 12", "Ter Tergitol NF un/Distrib Page=1, 2	7", " Tergitol NP-10", "Te gitol T1260", "Tergitol NP "40", retrieved from the in uted/HahtShop/HAHTpag	rgitol T1135' '-7", "Tergito ternet on 200 e/HS_Catalog	', ''Tergitol T ol TMN-10", '' 3-09-13: gSearch?Scope	MN-6", "T Tergitol Ti ≔NameSea	ergitol MN-3", rch&Qu	
EXAMINE	R	1	TWEKEN			DATE CONSIDERED	105				
						ance with MPEP 609; Draw li		ation if not in co	onformance	and not	

OF 9

<u>/</u> 0	TF	, 'u	\				ATTY DOCKET NO. HALB:045		SERIAL NO. 10/656,684			
			٦٠١	ATION DISCLOSURE is a several sheets if necess.			Jeff Miller and Jeff Kir	sner				
		<b>6 200</b> 0		29 2949191 2116912 II 1190922	ai y)		FILING September 5, 20	10	GROUP	<del></del>		
<u>C.</u>			<u>i3</u>		11.5	PATENT	DOCUMENTS					
*EXAMIN	A DS	MAR		DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE .		
INITIAL	7	BJ	5.25	52,554	10/12/1993	Mueller	et al. 507		138	01/21/1992		
	_	вк	<u> </u>	<u> </u>	08/03/1993	Mueller		507	138	09/06/19	01	
	_		<del>                                     </del>	32,910					<del></del>			
	_	BL_	4,96	64,615 	10/23/1990	Mueller	et al.	507	243	05/23/19	<del></del>	
		вм	5,83	37,655	11/17/1998	Hallida	y et al.	507	103	05/01/19	96	
·		BN	2,81	16,073	12/10/1957	Strattor	1	252	8.5	07/16/19	56	
		во	3,68	34,012	98/05/1972	Scheffel	et al.	166	283	06/12/19	70	
		BP	3,87	78,117	04/15/1975	William	s et al.	252	47	05/17/19	73	
		BQ	3,91	12,683	10/14/1975	O'Farre	ell	260	29.7	07/12/1974		
		BR	3,954,627 05/04/1976			Dreher et al.		252	8.5 P	11/07/19	11/07/1973	
1		BS	4,007,149 02/08/1977			Burton	et al.	260	29.7	07/02/19	75	
RI		BT	4,01	12,329 03/15/1977 Haye		Hayes (	et al.	252	8.5 P	09/22/19	75	
-					FORE	IGN PATE	NT DOCUMENTS					
				DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANS	ATION	
6	7	BU	wo	00 71241 A	11/30/2000	PCT		B01F	17/00			
		BV	EP	0 561 608 A	09/22/1993	Europe		C09K	7/06			
		BW	wo	99 50370 A	10/07/1999	PCT		C09K	3/00			
		BX	AU-	-B-75043/94	03/22/1995	Austral	ia	C09K	7/06			
1	7	BY	EP	0 124 194 A2	11/07/1984	Europe		C09K	7/06			
- 1			<b>*</b>	OTHER DOCUME	NTS (Includin	g Author	, Title, Date, Pertinent F	Pages, Etc.	)			
1	Y			Chapter 13, Synthetic, B	aroid Fluids Har	ndbook, R	evised August 1, 1997.					
. 1	(		BZ									
F,	1		CA	P.A. Boyd, D.L. Whitfill, Technology, 1985, pages	T.S. Carter, and 937-942.	J.P. Alla	mon, New Base Oil Used in	Low-Toxic	ity Oil Muds, 1	4 J. Petrole	um	
EXAMI	NER	2		P. WUREL			DATE CONSIDERED	105				
				ference considered, whether			ance with MPEP 609; Draw II	7 — —	itation if not in ∝	nformance	and not	

								بحراجات	
	100	·			ATTY DOCKET NO. HALB:045		SERIAL NO. 10/	656,684	
	O , LIN	FORMATION DISCLOSURE	E CITATION		Jeff Miller and Jeff Ki	rsner			
	SEP 1 6	2003			FILING September 5, 20	003	GROUP		
B		رگ نگار	U.S	S. PATENT	DOCUMENTS				
EXA!	WINER DE	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DAT	_
Po		4,148,821	04/10/1979	Nussba	um et al.	260	505 S	04/13/19	76
7	cc	4,153,588	05/08/1979	Makow	ski et al.	260	23.5	11/29/19	977
T	CD	4,390,474	06/28/1983	Nussba	um et al.	260	505 R	06/12/19	980
	CE	4,425,462	01/10/1994	Turner	et al.	524	400	09/13/19	982
	CF	4,447,338	05/08/1984	Lundbe	erg et al.	252	8.5M	08/12/19	981
	cc	4,488,975	12/18/1984	Almond	l	252	8.55 R	12/13/19	982
	СН	4,552,215	11/12/1985	Almond	l et al.	166	278	09/26/19	984
	CI	4,553,601	11/19/1985	Almond et al.		166	308	11/19/19	985
	ငပ	4,671,883	06/09/1987	Connell	et al.	252	8.515	07/12/19	985
ŀ	СК	4,787,990	11/29/1988	Boyd		252	8.511	02/04/19	983
1	CL	4,810,355	03/07/1989	Hopkin	s	208	58	03/31/19	988
V 1			FORE	IGN PATE	NT DOCUMENTS				
		DOCUMENT NUMBER	DATE		COUNTRY -	CLASS	SUBCLASS	TRANS	NO
P	1 CM	WO 95/21225	08/11/1985	PCT		C09K	7/00		
	CN	WP 95/09215	04/06/1995	PCT		C09K	7/00		
	со	EP 0 247 801 A2	12/02/1987	Europe	<del></del>	C09K	7/06		
	СР	EP 0 254 412	01/27/1988	Europe	·····	C09K	7/06		
P	CQ	GB 2,166,782 A	05/14/1986	United 1	Kingdom	C09K	7/06		
		OTHER DOCUME	NTS (Includin	ng Author	, Title, Date, Pertinent l	Pages, Etc	:.)		
		Friedheim, J.E., "Secon	d-Generation Sy	nthetic Dri	illing Fluids," SPE Disting	uished Auth	or Series: Dec.	1981-Dec.	1983.
	19								
	P	David Power, Jim Fried Contractor, pages 44-45	heim and Bret To 6 (May/June 2003	oups, M-I	L.L.C., "Flat Rheology SE	BM Shows F	romise in Deep	water, Drill	ling
AAX	AINER	P. Tucker			DATE CONSIDERED	105		است سامیت بیاسا	
'EXA	MINER: In	itial if reference considered, whether	er or not citation is	in conform	<del></del>	<del>/</del>	citation if not in a	onformance	and not
		lude copy of this form with next cor							

Copyright 1994 LegalStar

P09C/REV03

Patent and Trademark Office \* U.S. DEPARTMENT OF COMMERCE

OIP				HALB:045		10/	656,684	
/011	ÎNFQ	RMATION DISCLOSURI		Jeff Miller and Jeff Ki	rsner			
÷	2003	C)		FILING September 5, 20		GROUP		
Ce manus	ريون	y	U.S	S. PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE  IF APPROPRIATE	
	СТ	4,900,456	02/13/1990	Ogilvy	252	8.551	12/01/1988	
<del>- \} -</del>	cu	5,045,219	09/03/1991	Trahan et al.	252	8.51	11/22/1988	
	CV	5,189,012	02/23/1993	Patel et al.	507	103	06/08/1990	
	CW	5,333,698	08/02/1994	Van Slyke	175	65	05/21/1993	
	сх	5,432,152	07/11/1995	Dawson et al.	507	103	08/16/1994	
	CY	5,498,596	03/12/1996	Ashjian et al.	507	103	09/29/1993	
	cz	4,802,998	02/07/1989	Mueller et al.	252	8.514	07/08/1987	
	DA	5,106,516	04/21/1992	Mueller et al.	507 . 138		02/09/1990	
	DB	5,252,554	10/11/1993	Mueller et al.	507	138	01/21/1992	
-	DC	5,318,954	06/07/1994	Mueller et al.	507	138	06/29/1993	
P	DD	5,318,955	06/07/1984	Mueller et al.	507	139	03/24/1993	
9.[			FORE	EIGN PATENT DOCUMENTS				
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
Pl	DE	GB 2,212,192 A	07/19/1989	United Kingdom	C09K	7/06		
P	DF	WO 83/02949	09/01/1983	PCT	C09K	7/06		
81	DG	WO 94/16030	07/21/1994	PCT	C09K	7/06		
- • (								
							· ·	
		OTHER DOCUM		ng Author, Title, Date, Pertinent				
M			orizontal Directio	nal Drilling Fluid Concentrate, Baro	id Industria	al Drilling Produ	icts data sheet (1995)	
(5/		DH .			•			
		78						
EXAMINE	₹	P. TUCKER		DATE CONSIDERED	05			
*EVA1411-	D. 1-141		has as not election in	in conformance with MPEP 609; Draw		citation if not in c	conformance and not	
considered	r. initi . inclu	al it reference considered, whethere de copy of this form with next co	ommunication to ap	plicant.	unougn	CARRIOTI II HOURT	and not	

•	10	IPE				Docket Number (Optional) HALB:045	ľ	10/656,684				
1		INFO	RMATION DISCLOSURE			Applicant(s)  Jeff Miller and Jeff Kirsner						
10	SĒP	1 6 7	(Use several sheets if necessar,	אי		Filing Date	1	Group Art Unit				
- E					<u></u> -	September 5, 2003						
Ý	Co.	REP	Mary .		U.S. PAT	. PATENT DOCUMENTS						
EXAM INIT	iner Ial	RÉP	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING 1F APPRO			
Œ.	7	DI .	5,318,956	06/07/1994	Mueller	et al.	507	139	04/29/1993			
	$\prod$	DK	5,403,822	04/04/1995	Mueller	et al.	507	138	05/27/19	93		
		DL	5,441,927	08/15/1995	Mueller	et al.	507	138	11/09/19	94		
		DM	5,508,,258	04/16/1996	Mueller	et al.	507	135	04/28/19	95		
		DN	5,607,901	03/04/1997	Toups,	Jr. et al.	507	103	02/17/19	95		
		DO	RE 36,066	01/26/1999	Mueller	et al.	507	. 138	09/06/19	91		
		DP	5,868,434	02/09/1999	Mueller	et al.	507	110	06/06/19	95		
		DQ	5,909,779	06/08/1999	Patel et	t al.	175	50	06/30/19	98		
		DR	6,022,833	02/08/2000	Mueller et al.		507	203	09/18/19	97		
		DS	6,165,946	12/26/2000 Muell		et al.	507	203	10/21/1997			
1	7	DT 6,180,572 B1 01/30/2001			Mueller	et al.	507	209	12/06/19	96		
- 7	<del></del>			ī	FOREIG	N PATENT DOCUMENTS						
		REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Trans YES	ation NO		
								<del> </del>				
					<u> </u>			<del>                                     </del>				
								<del> </del>				
	_		<del></del>									
				*								
					OTHER!	DOCUMENTS (Including A	Suthor, Title	Date, Pertinent Pa	iges, E(c.)			
	-	T				(	,,					
						•				ľ		
		- 21										
EXAN	INF	R				DATE CONSIDERED						
			PITUCKER				11/05	, 				
			al if citation considered, whether o clude copy of this form with next c			ce with MPEP Section 609; D	raw line thro	ugh citation if no	t in conform	ance and		

155	PE	_			HALB:045 10/656,684					
6,	INFO	RATION DISCLOSURE  Use several sheets if necessar	CITATION		Applicant(s) Jeff Miller and Jeff Kir					
SEP	1 6 20	~4/			Filing Date September 5, 20		oup Art Unit			
SEP		ar Si		U.S. PAT	J.S. PATENT DOCUMENTS					
*EXAMINER*	AQE P	DOCUMENT NUMBER	DATE	1	NAME	CLASS	SUBCLASS		DATE PRIATE	
PY	DU	5,869,434	02/09/1999	Mueller	et al.	507	110	06/06/19	95	
	DV	6,211,119 B1	04/03/2001	Herold	et al.	507	103 11/10/199		97	
	DW	6,515,031	02//04/2003	Fefer		516	73	73 02/13/200		
	DX	5,407,909	04/18/1995	Goodhu	e, Jr. et al.	507	118	02/19/19	93	
	DY	5,552,462	09/03/1996	Yeh		524	55	11/22/19	93	
	DΖ	4,619,772	10/28/1986	Black et	al.	252	8.514	05/23/19	82	
•	EA	4,473,479	09/25/1984	Block		252	8.5 A	12/06/19	82	
	EB 4,428,845 01/31		01/31/1984	Block		252	8.5 A	12/02/1981		
	EC 4,422,947 12/27/			Dorsey	et al.	252	8.5 C	12/19/19	80	
	ED	4,366,070 12/28/1982 1				252	8.5 A	02/27/19	81	
PT	EF 4,264,455 04/28/1981			Block		252	8.5 B	10/28/19	78	
V (				FOREIG	N PATENT DOCUMENTS			,. <u></u>		
	REF	DOCUMENT NUMBER	DATE	COUNTRY		CLASS	SUBCLASS	Trans YES	NO	
			*							
							ate, Pertinent Po			
M		pages 27-28.	thing New in En	vironment	al Horizontal Installation,"	Inovations in	Drilling, WV	VJ, Februa	гу 1996,	
-41	'	EG								
P	1	Daniel B. Oakley, "Envi DOE Dept. of Technolog	ronmental Horiz y Development,	ontal Well Volume 1,	Installation and Performa No. 2, Fall 1995, pages 7 au	nce: Lessons nd 9.	Learned," H	orizontal N	ews,	
EXAMINE	R	PITUCHER			DATE CONSIDERED	165				
		al if citation considered, whether o					h citation if no	in conform	ance and	

ATTY DOCKET NO. SERIAL NO. 10/656,684 **HALB:045** INFORMATION DISCLOSURE CITATION Jeff Miller and Jeff Kirsner (Use several sheets if necessary) GROUP FILING SEP 1 6 2003 September 5, 2003 U.S. PATENT DOCUMENTS EXAMPLA FILING DATE CLASS SUBCLASS NAME DOCUMENT NUMBER DATE IF APPROPRIATE INITIAL 07/14/1978 252 8.5 B ΕI 03/10/1981 Block 4,255,268 07/13/1978 252 8.5 B EJ 12/23/1980 Block 4,240,915 8.5 A 12/19/1977 252 EK 04/24/1979 Jackson 4,151,096 252 8.5 A 05/24/1974 EL 10/26/1976 Hartfiel 3,988,246 507 213 12/21/1994 EM 01/07/1997 Hodge 5.591,699 12/30/1983 426 104 EN 12/17/1985 Chen et al. 4,559,233 458 05/16/1985 524 ΕQ 4,670,501 06/02/1987 Dymond et al. 10/28/1986 EP 524 458 10/11/1988 Dymond et al. 4,777,200 507 103 10/08/1997 EQ 12/22/1998 Halliday et al. 5,851,958 02/25/1997 507 103 ER 02/25/1997 Halliday et al. 5,605,879 ES 526 348 12/18/1997 US 6,451,953 B1 09/17/2002 Albright FOREIGN PATENT DOCUMENTS TRANSLATION COUNTRY SUBCLASS DOCUMENT NUMBER DATE CLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Mac Seheult, Len Grebe II, J.E. Traweek, Jr., Mike Dudley, "Biopolymer Fluids Eliminate Horizontal Well Problems," WORLD OIL, January 1990, Gulf Publishing Co., Houston, Texas. ET Bob Byrd, Mario Zamora, "Fluids are Key in Drilling Highly Deviated Wells," Petroleum Engineer International, pages 24-26 (February 1988) ΕU DATE CONSIDERED **EXAMINER** PILVER 11/05 \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820 (also form PTO-1449)

					ATTY DOCKET NO. HALB:045	:	SERIAL NO. 10/656,684				
0	INFO	DRMATION DISCLOSURE	CITATION		Jeff Miller and Jeff Kirsner						
/	1670	1900 2010101 010010 11 110000	sary)	ı	FILING		GROUP				
SEP SEP		i j			September 5, 2003						
EXAMINER	ane NI	<i>y'</i>	U.;	S. PATENT	DOCUMENTS	·		FILING DAT			
INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	IF APPROP			
PI	EV	6,204,224 B1	03/20/2001	Quinter	o et al.	507	123	10/12/1999			
			<del> </del>				1				
	-		<del> </del>			<del> </del>	+				
	├						-	<del> </del>			
	ļ		ļ			<del></del>	<del></del>	<del> </del>			
	<u> </u>					<u> </u>		<b>}</b>			
•			<u> </u>								
			<del> </del>				1				
•	<del> </del>		<del> </del>			<del>                                     </del>	+	-			
				<b></b>		<del></del>					
	<u> </u>			l		<u> </u>	<del>_</del>	<u> </u>			
	Γ		FORE	IGN PATE	NT DOCUMENTS	<del>1                                    </del>	<del></del>				
		DOCUMENT NUMBER	DATE		COUNTRY	SUBCLASS	YES	NO NO			
P	EW	WO 98/18882	05/07/1998	PCT		C09K	7/06	}	1		
		·					1				
						<del>                                     </del>	+				
<u> </u>			<del> </del>			<del> </del>	+				
	L	ATUEN BASINE	NTS (In-land)	. A. 45 = -	Title Date Badies 11	<u> </u>	1				
		OTHER DOCUME	MIDUIONI) 61M	g Autnor,	Title, Date, Pertinent I	-ages, Etc	.) 				
			<del></del>								
	}										
			•								
EXAMINE	₹	P. Tucken			DATE CONSIDERED						
*EXAMINE	R· Initia	I if reference considered, whether	er or not citation in	in conforma	Ince with MPEP 609: Draw		itation if not in an	nformance	and so		
considered	. Includ	le copy of this form with next cor	nmunication to app	olicant.	ince with Wifer 609; LITAW	mie unough c	HAUDT II NOT IN CO	ormance	anu NOE		

P09C/REV03

Petent and Tredemark Office \* U.S. DEPARTMENT OF COMMERCE